

### **REMARKS**

This Corrected Preliminary Amendment is refiled in response to the Notice of Non-Compliant Amendment mailed August 4, 2006, and is responsive to the Final Office Action dated April 27, 2006 and the Advisory Action mailed July 24, 2006. The status identifiers for claims 7, 16, and 29 have been corrected. All objections and rejections are respectfully traversed.

Claims 1-27 and 29-31 are currently pending in the case.

Claims 1, 6-7, 11, 16-17, 21, and 24 were amended.

New claim 31 has been added.

#### ***Response to Advisory Action***

The Applicant thanks the Examiner for commenting in the Advisory Action specifically on the Applicant's arguments, as it has helped the Applicant better understand the Examiner's reasoning. In hopes of advancing the prosecution of the case, the Applicant here responds specifically to the Examiner's comments.

The Examiner points to a "queue control block of Fig. 2" of Buchholz as showing aspects of the Applicant's claims. While it appears that Fig. 2 does not specifically show a "queue control block," the Applicant has located discussion of a "queue control block" in the text of Buchholz and believes this description is what the Examiner is referring to. Buchholz states at col. 6, lines 23-35 (emphasis added)

The virtual circuit ID field 510 contains information that specifies a virtual circuit register contained within packet switch 140 of FIG. 2. *The virtual circuit register points to or addresses a queue control block which in turn points to read and write packet descriptors which can point to an additional packet descriptor, as well as to read and write buffer descriptors. The buffer descriptors each point to a write buffer and to a next read and write buffer descriptor, thereby forming a chain or link of ad-*

*dresses for defining which buffer location the message data portion of a received transmission packet not requiring reassembly will be stored.*

The Applicant respectfully urges that, Buchholz makes clear that this description is not related to packet reassembly, but instead is related to how data of packets not requiring reassembly is stored. Accordingly, such description should not be considered to anticipate the Applicant's claimed packet reassembly techniques.

Yet, even if the Examiner believes the passage in Buchholz is applicable to the Applicant's claims, Buchholz's queue control block and read and write packet descriptors operate differently than the structures claimed by the Applicant. Buchholz's queue control block points to read and write descriptors, which then point to other descriptors to form a chain, i.e. a linked list. In contrast, the Applicant claims in claim 1, "placing the contents of the fragment packet descriptor in a packet descriptor associated with the packet, the packet descriptor descriptive of the entire packet". Simply linking descriptors does not suggest placing the contents of one type of descriptor, a *fragment packet descriptor*, in another type of descriptor, a *packet descriptor*.

#### *Claim Rejections - 35 U.S.C. §102*

At page 2 of the Final Office Action, claims 1-27, 29 and 30 were rejected under 35 U.S.C. §102 as anticipated by Buchholz et al., U.S. Patent No. 5,440,545, issued on August 8, 1995 (hereinafter Buchholz).

The Applicant's claim 11, representative in part of the other rejected claims, sets forth:

11. A method for reassembling a packet by a network device, the method comprising the steps of:
  - receiving a plurality of fragments associated with the packet;
  - determining if all the fragments for the packet have been received;
  - and

***issuing a request to reassemble the packet to a reassembly assist function if all the fragments for the packet have been received.***

Buchholz discloses a packet switching system that reassembles fragments of a fragmented data packet. The packet switching system includes a central processor (*see* Fig. 1, 110) and a reassembly control structure (*see* Fig. 2, 214). When a first fragment of a particular fragmented packet arrives at the packet switching system, the reassembly control structure (*see* Fig. 2, 214) generates a packet start interrupt (*see* Fig. 11, 1150), and sends it to the central processor. *See* col. 13, lines 7-11 and col. 14, lines 15-18. Thereafter, the reassembly control structure reassembles the fragments with minimal processor intervention. *See* col. 5, lines 6-26, 31-40 and col. 2, lines 4-6. Finally, when all the fragments of the packet are received and reassembled, a Packet Complete Interrupt (*see* Fig. 11, 1140) is generated by the reassembly control structure, and is sent to the central processor. In response to this interrupt, the central processor directs retransmission of the reassembled packet. *See* col. 13, lines 7-11 and lines 61-68.

The Applicant respectfully urges that Buchholz is silent concerning the Applicant's claimed ***"issuing a request to reassemble the packet to a reassembly assist function if all the fragments for the packet have been received."***

First, instead of disclosing ***issuing a request to*** a special ***reassembly assist function***, Buchholz instead discloses issuing an interrupt (in a sense a request) ***by*** a reassembly control structure to another device. Specifically, Buchholz describes a Packet Complete Interrupt (*see* Fig. 11, 1140) is sent ***by*** the reassembly control structure (*see* Fig. 2, 214) to the central processor when all fragments of the packet have been received and reassembled, and the packet is ready for transmission. Thus, in Buchholz, the reassembly control structure does not ***receive*** a request telling it that ***all the fragments for the packet have been received***, but instead sends this information to the processor, to direct and control the processor's actions.

Second, Buchholz is silent concerning *a request to reassemble the packet* that is issued to a reassembly assist function. As the Examiner points out, Buchholz's reassembly control structure may receive other types of requests, for example acknowledgement signals (ACKs). *See* Final Office Action page 5, 3<sup>rd</sup> full paragraph). Yet, such other types of requests may not fairly be interpreted as *a request to reassemble the packet*, since they perform other functions and in no way indicate a packet should be reassembled. For example, an ACK indicates a fragment has been received, rather than that a packet should be reassembled.

Accordingly, the Applicant respectfully urges that Buchholz is legally insufficient to anticipate the present claims under 35 U.S.C. §102 because of the absence of the Applicant's claimed novel *"issuing a request to reassemble the packet to a reassembly assist function if all the fragments for the packet have been received."*

The Applicant's claim 1, representative in part of the other rejected claims, sets forth:

1. A method for reassembling a packet by a network device, the method comprising the steps of:  
    locating a fragment packet descriptor associated with the packet,  
    *the fragment packet descriptor including a pointer to an area of memory where data of the fragment is stored;* and  
    *placing the contents of the fragment packet descriptor in a packet descriptor associated with the packet, the packet descriptor descriptive of the entire packet.*

The Applicant respectfully urges that Buchholz is silent concerning the Applicant's claimed *"fragment packet descriptor including a pointer to an area of memory where data of the fragment is stored"* and *"placing the contents of the fragment packet descriptor in a packet descriptor associated with the packet, the packet descriptor descriptive of the entire packet."*

While the Applicant claims a *fragment packet descriptor including a pointer to an area of memory where data of the fragment is stored* and a *packet descriptor*, and *placing the contents of the fragment packet descriptor in a packet descriptor*, the portion of Buchholz cited by the Examiner is related to packets not requiring reassembly. Thus, such portion of Buchholz is inapplicable to the Applicant's claimed reassembly techniques.

Further, Buchholz describes linking descriptors by having one descriptor point to another. Such linking does not suggest the Applicant's placing of the contents of one type of descriptor, a *fragment packet descriptor*, in another type of descriptor, a *packet descriptor*.

Accordingly, the Applicant respectfully urges that the Examiner has misinterpreted these portions of Buchholz, and that Buchholz is legally insufficient to anticipate the present claims under 35 U.S.C. §102 because of the absence of the Applicant's claimed novel "*fragment packet descriptor including a pointer to an area of memory where data of the fragment is stored*" and "*placing the contents of the fragment packet descriptor in a packet descriptor associated with the packet, the packet descriptor descriptive of the entire packet.*"

In the event that the Examiner deems personal contact desirable in disposition of this case, the Examiner is encouraged to call the undersigned attorney at (617) 951-2500.

All independent claims are believed to be in condition for allowance.


All dependent claims are believed to be dependent from allowable independent claims.

The Applicant respectfully solicits favorable action.

Please charge any additional fee occasioned by this paper to our Deposit Account

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Respectfully submitted,

  
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